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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/899,833	07/05/2001	Raymond Walter Ellis	21183-P001P1	9671

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EXAMINER	
JEAN GILLES, JUDE	
ART UNIT	**PAPER NUMBER**
2143	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/27/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	09/899,833	ELLIS ET AL.	
	Examiner	Art Unit	
	Jude J. Jean-Gilles	2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _____.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4,6,8-14,16,18-24,26,28-48 and 52-54* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *1,2,4,8-12,14,18-22,24,28-30 and 43-48* is/are rejected.

7)☒ Claim(s) *3,6,13,16,23,26,31-42 and 52-54* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *08/24/2001* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

This Action is in regards to the Reply received on 11/13/2006.

Response to Amendment

1. This action is responsive to the application filed on 11/13/2006. Claims 1-4, 6, 8-14, 16, 18-24, 26, 28-48 and 52-54 were pending in the Application prior to the outstanding Office Action. In the listing of claims above, claims 1, 2, 9, 11, 12, 19, 21, 22, 29, 34, 38, 42 and 52 - 54 have been amended. Therefore claims 1-4, 6, 8-14, 16, 18-24, 26, 28-48 and 52-54 are now pending in the application, and represent a method and apparatus for a "**Automated tool management in a multi-protocol environment**".

Response to Arguments

2. Applicant's arguments with respect to claims 1, 11and 21 have been carefully considered, but are not deemed fully persuasive. Applicant's arguments are deemed moot in view of the following new ground of rejection as explained here below, necessitated by Applicant substantial amendment (i.e., a method wherein extracting a first pointer from the contents of said first message in order to identify a first object in an equipment model, and extracting a second pointer from the contents of said second message in order to identify said first object in said equipment model, wherein said second selected protocol is different than said first selected protocol) to the claims which significantly affected the scope thereof.

The dependent claims stand rejected as articulated in the First Office Action and all objections not addressed in Applicant's response are herein reiterated.

In response to Applicant's arguments, 37 CFR § 1.11(c) requires applicant to "clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. He or she must show the amendments avoid such references or objections."

Allowable Subject Matter

3. **Claims 3, 6, 13, 16, 23, 26, 31-42, and 52-54** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claim

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. **Claims** *1, 2, 4, 8-12, 14, 18-22, 24, 28, 29, 30, and 43-48* are rejected under 35 U.S.C. 103(a) as being unpatentable over Nethercott et al (hereinafter Nethercott) U.S. patent 6,094,678 in view of Orikiri, U.S. Patent No. 6,016,516.

Regarding **claim 4**, Nethercott discloses the invention substantially as claimed. Nethercott teaches method for automated tool management (figs. 3; 11 A-B) comprising the steps of:

receiving a first message in a first selected protocol from a first client application, wherein said first message comprises a first request to perform a first action on a first tool (column 20, lines 43-55),

extracting a first pointer from the contents of said first message in order to identify a first object in an equipment model, wherein said equipment model comprises a logical representation of said first tool (column 22, lines 22-38);

invoking a first procedure of said first object in response to said first message;

transferring a first return value to said first client application, wherein said first return value is associated with said first action (column 22, lines 22-38);

receiving a second message in a second selected protocol from a second client application, wherein said second message comprises a second request to perform a second action on said first tool (column 20, lines 23-31);

extracting a second pointer from the contents of said second message in order to identify said first object in said equipment model, wherein said second selected protocol is different than said first selected protocol (column 20, lines 43-55; column 11, lines 20-30); However, Nethercott does not specifically disclose the details of "invoking a second procedure of said first second object in response to said second message; and transferring a second return value to said second client application, wherein said second return value is associated with said second action."

In the same field of endeavor, Orikiri discloses a (... *The remote procedure client has a means for requesting specification disclosure receiving a retrieval expression for specifying the specification disclosing means; a means for generating messages, generating a first message containing the retrieval expression received by the specification disclosure requesting means, generating a second message for requesting a procedure call, and generating a third message in which the second message is substituted for the parameter value; a second means for communicating sending of the first message generated by the message generating means and receiving hypertext sent from the first communication, means of the remote procedure server in response to the message; a means for analyzing hypertext, analyzing the hypertext received from the second communicating means and extracting parameter data contained in the specifications of the remote procedure; and a means for storing the second message generated by the message mean* ...) [*see* Orikiri, *column 4, lines 56-67; column 5, 1-15*].

Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Orikiri's teachings of a method and apparatus for invoking a second procedure of said first second object in response to said second message with the teachings of Nethercott, for the purpose of providing remote procedure client application to combine a plurality of remote procedure servers to obtain a desired service as stated by Orikiri in lines 12-15 of column 2. By this rationale **claim 1** is rejected.

2. (Currently Amended) The method as recited in Claim 1, wherein said first message further comprises data and wherein said step "of invoking passes said data to said first procedure (see Nethercott; column 19, lines 14-21).

4. (Previously Presented) The method as recited in Claim 1, wherein if said first request comprises a request for data and if said first tool is a synchronous source of said data (see Nethercott; column 6, lines 32-64), then the method further comprises the steps of:

retrieving information from said first tool (column 22, lines 22-38);

creating said first return value based on said information; incorporating said first return value into a return message to said first client application; and transferring said return message in said first selected protocol to said first client application in response to an address provided by said first client application [*see* Orikiri, *column 4, lines 56-67; column 5, 1-15*].

5. (Canceled)

7. (Canceled)

8. (Previously Presented) The method as recited in Claim 1, wherein said first protocol and said second protocol comprise protocols selected from the following: Component Object Model (COM), Remote Method Invocation (RMI), CORBA, Simple Object Access Protocol (SOAP), SECS, GEM, HyperText Markup Language (HTML), Extensible Markup Language (XML) (*see* Orikiri; fig. 22).

9. (Currently Amended) The method as recited in Claim 1, wherein said first procedure method of said first object is invoked to remotely access and electronically diagnose said first tool (column 22, lines 22-38; column 20, lines 43-55).

10. (Previously Presented) The method as recited in Claim 2, wherein said data in said message is notification data (column 22, lines 22-38; column 20, lines 43-55).

11. (Currently Amended) A computer program product having a computer readable storage medium having computer program logic recorded thereon for automated tool management (fig. 3, 11 A-B), comprising:

programming operable for receiving a first message in a first selected protocol from a first client application, wherein said first message comprises a first request to perform a first action on a first tool (column 20, lines 43-55);

programming operable for extracting a first pointer from the contents of said first message to identify a first object in an equipment model, wherein said equipment model comprises a logical representation of said first tool (column 22, lines 22-38);

programming operable for invoking a first procedure of said first object in response to said first message (column 22, lines 22-38); and

programming operable for transferring a first return value to said first client application, wherein said first return value is associated with said first action (column 22, lines 22-38);

programming operable for receiving a second message in a second selected protocol from a second client application, wherein said second message comprises a second request to perform a second action on said first tool(column 20, lines 23-31);

programming operable for extracting a second pointer from the contents of said second message to identify said first object in said equipment model, different than said first selected protocol (column 20, lines 43-55; column 11, lines 20-30);

programming operable for invoking a second object in response to said second message; and wherein said second selected protocol is procedure method of said first second programming operable for transferring a second return value to said second client application, wherein said second return value is associated with said second action[*see* Orikiri, *column 4, lines 56-67; column 5, 1-15*].

12. (Currently Amended) The computer program product as recited in Claim 11, wherein said first message comprises data and further comprising: programming operable for passing said data to said first procedure method.

14. (Previously Presented) The computer program product as recited in Claim 11, wherein if said first request comprises a request for data and if said first tool is a synchronous source of said data (see Nethercott; column 6, lines 32-64), then the computer program product further comprises:

programming operable for retrieving information from said first tool (column 22, lines 22-38);

creating said first return value based on said information; incorporating said first return value into a return message to said first client application; and programming operable for transferring said return message in said first selected protocol to said

first client application in response to an address provided by said first client application [*see* Orikiri, *column 4, lines 56-67; column 5, 1-15*].

15. (Canceled)

17. (Canceled)

18. (Previously Presented) The computer program product as recited in Claim 11, wherein said first protocol and said second protocol comprise protocols selected from the following: Component Object Model (COM), Remote Method Invocation (RMI), CORBA, Simple Object Access Protocol (SOAP), SECS, GEM, HyperText Markup Language (HTML), Extensible Markup Language (XML) (*see* Orikiri; fig. 22).

19. (Currently Amended) The computer program product as recited in Claim 11, wherein said first procedure of said first object is invoked to remotely access and electronically diagnose said first tool.

20. (Previously Presented) The computer program product as recited in Claim 12, wherein said data in said message is notification data (column 22, lines 22-38; column 20, lines 43-55);

21. (Currently Amended) A system, comprising: a processor; a memory unit storing a computer program operable for storing a computer program operable for automated tool management; and a bus system coupling the processor to the memory (figs. 3; 11 A-B), wherein the computer program is operable for performing the following programming steps:

receiving a first message in a first selected protocol from a first client application, wherein said first message comprises a first request to perform a first action on a first tool (column 20, lines 43-55);

extracting a first pointer from said first message to identify a first object in an equipment wherein said equipment model comprises a logical representation of said first tool(column 22, lines 22-38);

invoking a first procedure of said first object in response to said first message (column 22, lines 22-38); and

transferring a first return value to said first client application, wherein said first return value is associated with said first action (column 22, lines 22-38);

receiving a second message in a second selected protocol from a second client application, wherein said second message comprises a second request to perform a second action on said first tool (column 20, lines 23-31);

extracting a second pointer from said second message to identify said first object in said equipment models, wherein said second selected protocol is different than said first selected protocol (column 20, lines 43-55; column 11, lines 20-30);

invoking a second procedure of said first object in response to said second message; and transferring a second return value to said second client application, wherein said second return value is associated with said second action [*see* Orikiri, *column 4, lines 56-67; column 5, 1-15*].

22. (Currently Amended) The system as recited in Claim 21, further characterized in that said first message comprises data and the computer program is operable for

passing said data to said first procedure method in said step of invoking [*see* Orikiri, *column 4, lines 56-67; column 5, 1-15*].

24. (Previously Presented) The system as recited in Claim 21, wherein if said first request comprises a request for data and if said first tool is a synchronous source of said data (see Nethercott; column 6, lines 32-64), then the computer program is further operable for performing the following programming steps:

retrieving information from said first (column 22, lines 22-38);

creating said first return value based on said information; incorporating said first return value into a return message to said first client application; and transferring said return message in said first selected protocol to said first client application in response to an address provided by said first client application [*see* Orikiri, *column 4, lines 56-67; column 5, 1-15*].

25. (Canceled)

27. (Canceled)

28. (Previously Presented) The system as recited in Claim 21, wherein said first protocol and said second protocol comprise protocols selected from the following: Component Object Model (COM), Remote Method Invocation (RMI), CORBA, Simple Object Access Protocol (SOAP), SECS, GEM, HyperText Markup Language (HTML), Extensible Markup Language (XML) (*see* Orikiri; fig. 22).

29. (Currently Amended) The system as recited in Claim 21, wherein said first procedure of said first object is invoked to remotely access and electronically diagnose said first tool.

30. (Previously Presented) The system as recited in Claim 22, wherein said data in said message is notification data.

43. (Previously Presented) The method as recited in Claim 1, wherein said step of receiving a first message and said step of transferring a first return value are performed by an application interface unit, wherein said application interface unit interfaces said first client application with said equipment model (column 22, lines 22-38; column 20, lines 43-55).

44. (Previously Presented) The method as recited in Claim 4, wherein said step of retrieving information from said first tool is performed by a tool interface unit, wherein said tool interface unit interfaces said first tool with said equipment model (column 22, lines 22-38; column 20, lines 43-55).

45. (Previously Presented) The computer program product as recited in Claim 11, wherein said programming operable for receiving a first message and said programming operable for transferring a first return value are implemented by an application interface unit, wherein said application interface unit interfaces said client application with said equipment model [*see* Orikiri, *column 4, lines 56-67; column 5, 1-15*].

46. (Previously Presented) The computer program product as recited in Claim 14, wherein said programming operable for retrieving information from said first tool is implemented by a tool interface unit, wherein said tool interface unit interfaces said first tool with said equipment model (column 22, lines 22-38; column 20, lines 43-55);

47. (Previously Presented) The system as recited in Claim 21, wherein said step of receiving a first message and said step of transferring a first return value are performed by an application interface unit, wherein said application interface unit interfaces said client application with said equipment model [*see* Orikiri, *column 4, lines 56-67; column 5, 1-15*].

48. (Previously Presented) The system as recited in Claim 24, wherein said step of retrieving information from said first tool is performed by a tool interface unit, wherein said tool interface unit interfaces said first tool with said equipment model.

49-51. (Canceled)

Conclusion

6. **THIS ACTION IS MADE FINAL**. Any inquiry concerning this communication or earlier communications from examiner should be directed to Jude Jean-Gilles whose telephone number is (571) 272-3914. The examiner can normally be reached on Monday-Thursday and every other Friday from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley, can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-9000.

Jude Jean-Gilles

Patent Examiner

Art Unit 2143

DAVID WILEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

JJG

February 11, 2007